DOCUMENT RESUME

ED 230 163 HE 016 243

AUTHOR Dressel, Paul L.; Guiste, Evelyn B.
TITLE Ph.D. and Ed.D. Program Adaptations for College Teachers.
SPONS AGENCY Carnegie Corp. of New York, N.Y.
PUB DATE 1 Apr 83
NOTE 25p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Case Studies; *College Faculty; *Degree Requirements; Departments; *Doctoral Degrees; *Education Majors; Higher Education; *Preservice Teacher Education; School Surveys; *Teacher Education Curriculum; Teaching (Occupation)

ABSTRACT

The extent to which the Ph.D. and/or Ed.D. programs have been adapted to assist in preparing students for college teaching was surveyed. Of 309 universities, 122 responded, and of these, 72 had no adaptations. However, 50 universities indicated the availability, in at least one discipline or field, of modifications in the Ph.D. and/or Ed.D. programs for individuals pursuing a career in college teaching. Although it is unclear if the university-wide statements were sanctioned by the graduate school, department, or doctoral committees, the following universities had such statements for the Ph.D. program: Ball State University, Bowling Green State University, Clark University, Duke University, Wake Forest University, and the University of Kansas. Candidates are required to participate in one or more of the following: teach a course in one specific discipline, register or take a course oriented to college teaching, and teaching apprenticeship. Thirty universities indicated the existence of departmental Ph.D. program modifications. In addition to listing departmental requirements and Ph.D. and Ed.D. modifications, case studies of adaptations are included. (SW)

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Ph.D. and Ed.D. PROGRAM ADAPTATIONS for COLLEGE TEACHERS

Paul L. Dressel
Evelyn B. Guiste

Michigan State University
East Lansing, Michigan

U.S. DEPARTMENT OF EDUCATION
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Preparation and Publication Facilitated by Assistance from the Carnegie Corporation of New York

HE 016 243

Preface

Over several years, I have watched with interest and reported upon the development and maturation of Doctor of Arts programs in some 25 institutions. Those reports are listed in the bibliography at the close of this monograph. The materials collected and the observations of the various programs were dependent upon the interest and cordial cooperation of the faculty and administrators responsible for the various D.A. programs. It is my belief that the existence of these D.A. programs encouraged the faculty members and administrators in other doctoral programs to consider and perhaps provide for career committed college teachers some amelioration of heavily research emphasis which has come to be characteristic of the Ph.D. This monograph is an attempt to collect and report on modifications and adaptations in the Ed.D. and Ph.D.

Ph.D. and Ed.D. Program Adaptations for College Teaching

Although a doctoral degree (traditionally the Ph.D.) has come to be regarded as a necessity for a career in college teaching, there are many participants in and critics of college teaching who have expressed doubts of the validity of the Ph.D. as a preparation for that task. Although undergraduate teaching and research on the frontiers of a discipline can support each other, it is frequently true that the frontiers being explored by freshmen or sophomores and those being explored or revisited by the research oriented professor are far apart and require markedly differing approaches.

We do not, in this brief monograph, propose to elaborate or debate the criticisms of the Ph.D. and the need for new approaches, alternate tracks, or even a new degree. The senior author has elsewhere reported both upon the development of the Doctor of Arts degrees and on various modifications or adaptations of the Ph.D. and Ed.D. to make those degrees more relevant to undergraduate instruction. In the references listed at the end of this monograph see especially *College Teaching, Improvement by Degrees* by Paul L. Dressel and Mary Magdala Thompson.

However, the adaptations then reported are those existing prior to 1974 and an updating seemed desirable. The disappearance of some adaptations previously noted indicates that the existence of possible adaptations does not assure that they will be used. Unless degree candidates seek for them and professors encourage their use, pious paper expressions of possible modifications will be ignored and ultimately disappear. Doctoral candidates are wisely dubious of alternatives that have less than hearty support by their professors especially if those alternatives are added on to the traditional degree requirements.

To provide a background for discussion of degree adaptations, we present in the following paragraphs a digest of some of the views and recommendations that have emerged from discussions of college teaching requirements and have often been influential in the formulation of D.A. program requirements. The presentation of these statements and recommendations does not indicate a belief on our part that each and every one must be met by an individual who intends to be a good teacher. We certainly do not believe that a degree program must include courses covering each point. For example, the careful reading of anyone of several books on American higher education is likely to be as effective and certainly more efficient in providing an overview of the history of American higher education than is the taking of a three credit course on history of American higher education.

This report is not complete, because many institutions did not respond. Furthermore graduate school requirements, departmental specifications, and individual program adaptations are not easily separable. My associate, Evelyn Guiste, spent many hours interpreting, analyzing, and summarizing diverse

and sometimes confusing program descriptions. Perhaps the major contribution of this study is to demonstrate that degree adaptations for college teachers are available, that certain adaptations are more common than others, and that some institutions and departments are more amendable to making adaptations than are others.

I would express particular appreciation to Dr. Alden Dunham of the Carnegie Corporation for encouraging my interests in improvement of college teaching and facilitating the acquisition of funds to support this and previous studies.

Paul L. Dressel
April 1, 1983

I. REQUIREMENTS AND RECOMMENDATIONS FOR COLLEGE TEACHER PREPARATION

College teaching as a career requires more than disciplinary scholarship. It involves bringing the teacher, student, and materials together in an environment to engage in certain processes which promote the attainment of comprehensive personal and social goals inclusive of cognitive, affective, and psychomotor components. College teachers work predominantly with post secondary students in late adolescence and young adulthood. Therefore, in order to foster students' learning, the requirements for effective teaching performance include knowledge, skills, insights, and experiences in the following areas:

1. A liberal educational background and a high level of effectiveness in communication.
2. Historical background of American higher education, academic and psychological organization.
3. Knowledge of the process of human learning, teaching methodologies, educational objectives, and classroom experiences which would give the individual a practical awareness of the learning process and of individual differences in interest and ability so that adaptations can be made and that students will become capable of continuing their learning beyond the confines of the classroom and campus.
4. Professional in-depth knowledge of the broad sweep of the discipline or field relevant to undergraduate education; an ability to present effectively to students a well defined and organized body of content using the latest appropriate technology; and an awareness of and willingness to use a wide range of media for improving instruction and constructing more effective courses, its structure and methodologies.
5. An awareness of student's concerns and motivation and an ability to interpret the teacher's field and its implications in such a way as to arouse student's interest.
6. Facility in development of feedback whereby each student is informed of his or her progress.

To prepare individuals for a career in college teaching, universities have an obligation to re-examine and clarify their degree programs, and explicitly state their commitment to provide such a program. Hence, a program which offers college teaching as a career must have:

1. admission requirements that specify evidence of a deep interest and possibly some experience in teaching, evidence of interest in com-

municating knowledge in ways that make a difference in the thought patterns and capabilities of students, and evidence of interest in interrelations of disciplines and of their applicability in understanding and resolving the problems of individuals and society,

2. systematic individual evaluation of degree candidates that is as much concerned with ability to communicate effectively with students as with measurement of their substantive knowledge,

3. extradepartmental and interdisciplinary courses or seminars that require that the student relate his or her field of major study to other fields so as to enhance student insights into the significance of the major field and make it more meaningful to students of diverse interests and abilities,

4. graduate courses in which the professors are as concerned about the effectiveness of their own presentations as with the details and niceties of the materials presented,

5. graduate advisers who are in continuing contact with the candidates to assist them in interrelating and acquiring maximum benefits from their several experiences,

6. flexibility so that program adjustments can and will be made as justified on the basis of formal appraisal of the program relevant to accomplishments exhibited in the candidate's prior experiences,

7. program definition in terms of attainment of the competencies required for successful college teaching rather than solely by credit quotas or precise specification of the various elements of the program,

8. the possibility of programs embracing two or more disciplines viewed not as providing mastery of the several disciplines but rather as justified by the grasp of unifying inter or transdisciplinary principles, problems, or themes and by the type of instruction and institutional program toward which the candidate is career oriented,

9. an internship which, depending on the prior experience and ability of the individual, may move through several levels from observation of an unusually effective professor, assisting and consulting such a person, developing and presenting (not solely by lecture) materials under the supervision of this professor, and culminating in full responsibility for preparing, teaching, and evaluating one or more courses,

10. teaching experiences with non-majors, thereby, requiring the teacher to become aware of the diversity in students' backgrounds and goals,

11. a dissertation, research, or evaluation effort, often related to the internship, that provides a demonstration of the prospective teacher's ability to interpret a disciplinary base to students in ways that facilitate broad behavioral learning rather than rote recall of facts.

The preceding statement summarizes experiences as stated in the various specifications for Doctor of Arts programs designed for college teachers. However, many Ph.D. programs and some Ed.D. programs provide adaptations for those primarily concerned with undergraduate college teaching. It is not to be expected that all of the above specifications either will or can be provided in the Ph.D. or Ed.D. Hence, this particular study was designed to update the extent to which the Ph.D. and/or Ed.D. programs have been adapted to assist in preparing students for college teaching. The request was directed to the graduate schools of 309 universities to obtain:

1. copies of formal statements from catalogs and policies which provide explicit recognition of degree requirement adaptations appropriate to individuals planning a career in college teaching (Ph.D. or Ed.D.),
2. some indications as to the extent to which these alternatives are being used including:
   a) the specific discipline/s in which these adaptations are available
   b) the number of individuals over the past five years who completed doctoral requirements adapted to a career in college teaching.

122 universities responded. Of the 122, 72 reported no adaptations, but 50 universities indicated the availability, in at least one discipline or field, of modifications in the Ph.D. and/or Ed.D. programs for individuals pursuing a career in college teaching. The following universities reported some type of adaptation in their Ph.D. or Ed.D. programs in one or more disciplines.

Ph.D. Program

Ball State University
Bowling Green University
Clark University
Duke University
Emory University
Indiana State University
Kansas State University
Loma Linda University
Marquette University
Miami University
Michigan State University
New York State College of Agriculture and Life Science —Cornell University
North Dakota University
Northeastern University
Northern Arizona University
Oakland University
Ohio State University
Purdue University

Turfts University
University of Alabama in Birmingham
University of California, Davis
University of California, Los Angeles
University of California, Santa Barbara
University of Kansas
University of New Mexico
University of North Dakota
University of Rochester
University of South Alabama
Virginia Commonwealth University
Wake Forest University

Ed.D. Program

Florida Atlantic University
Illinois State University
Memphis University
New Mexico State University
Nova University
Oklahoma State University
Oregon State University
Rutgers University
Utah State University

Both Ph.D. & Ed.D. Programs

Florida State University
Indiana University of Pennsylvania
Loyola University
North Carolina State University
North Texas State University
Stanford University
University of Arizona
University of Oklahoma
University of Vermont
Washington State University
Western Michigan University

The adaptations reported vary markedly in nature and scope. Some statements only indicate a possibility of adaptations apparently leaving it to the individual graduate student and adviser to define a program. The desirability and possibility of distinctive research and undergraduate teaching tracks is implied in some degree specifications, but no formal designations of separate tracks are found in the materials received.

The review of available information on the 187 non-responding institutions suggests that most of them have no stated provision for program adaptations, but obviously we are unable (and, infact, did not intend) to make any statement about the nationwide prevalence of teaching adaptations or alternatives in doctoral programs. Rather our concern in this report is first to demonstrate that a number of institutions including some of nationally recognized stature, provide adaptations and second, to indicate the nature of these adaptations. Some adaptations are institutional wide, some are limited to a particular program, while others (such as teaching experiences) are part of the requirement for admission into or completion of a degree. The following categories provide an indication of the existence (among the 122 responding universities) of various alternatives.

University Wide Requirements — Ph.D. Program Modifications

It is generally not clear whether or how such program requirements are enforced by the graduate office, department, or doctoral committees. Neither is it clear what standards of performance are specified or how they are evaluated. University wide requirements were found only in six institutions: Ball State University, Bowling Green University, Duke University, Wake Forest University, and the University of Kansas. Candidates in these institutions are required to participate in one or more of the following Ph.D. program modifications for college teaching:

- take a course or seminar offered in major department in the teaching of a specific discipline,
- serve a one-semester teaching apprenticeship,
- teach one or more courses as specified in an individual's doctoral program.

Departmental Requirements — Ph.D. Modifications

Some departments design their programs on the assumption that doctoral recipients are likely to become college teachers, or to informally teach others as part of professional work. As a result, some type of teaching activities may be incorporated into the departmental requirements. In some universities although no specific or explicit statements were found in the catalog in regards to the Ph.D. and Ed.D. program adaptation, implications were that programs might be flexibly adapted to individuals desirous of pursuing a career in college teaching. These adaptations will be described under several subtopics. Students in the disciplines indicated are required to participate in one or more of the following experiences. Departmental statements tend to be idiosyncratic. Most of the statements that follow indicate various types or forms of teaching related experience and the discipline in which they were reported.

Non-specific Teaching Experience Requirements

Teaching Apprenticeship: work with a professor in the process of preparing and teaching a course (Sociology and Religion).

Teaching Practicum: clinical experiences provided for the teaching of Social Policy and Social Work.

Individual Adaptations: teaching experience tailored to fit candidate (Engineering Design).

Co-teaching: work with a professor in teaching a small advanced course (Psychology).

Externship: earn credit via externship at other institutions.

Instructional Material: prepare and evaluate instructional material (History).

Dissertation/Thesis: research may be done on: (a) a common problem to teaching (Science); (b) the improvement of teaching (English); or (c) an appropriate topic related to teaching (English).

Internship: demonstrate the capacity to teach in various forms of on-campus and off-campus training activities (English and American Literature, Geography); supervised internship (Religious Studes); or earn credit via internship, teaching a course within the department in which the doctorate is sought.

Supervised Teaching: students in several disciplines are required to teach under the supervision of the faculty: Physics, Modern Thought and Literature, Religious Studies, Economics, and History.

Students in several disciplines are expected to complete the following requirements:

- **Communication:** three terms of supervised teaching.
- **Drama and Humanities:** three terms of supervised teaching (half time), and one term of supervised teaching (quarter time).
- **English:** three terms of supervised teaching, or teach a single section of English composition for one semester.
- **French and Italian:** three terms of supervised teaching.
- **Anthropology:** one term of supervised teaching of a suitable course in the second and third year.
- **Music:** three terms of supervised teaching at half time or one term at quarter time.

Specific Teaching Experience Requirements

Specific activities are provided in at least one university for individual students to gain teaching experiences and demonstrate teaching efficiency in the following disciplines: Anatomy, Economics, Chemistry, Geography, Humanities, Zoology, German, History, Genetics, and Science. For other disciplines, students are expected to teach or co-teach:

- a section of Statistics or Laboratory course,
- four quarters of Slavic Languages and Literature,

- four quarters of supervised half time teaching in Modern Thought and Literature,
- courses in Philosophy for two to four semester,
- a minimum of three courses in Biology. Students are also responsible for laboratory sections or lecture session. They may also earn one year of teaching experience.
- any two of these courses: Gross Anatomy, Histology, or Neuroscience,
- at lease one undergraduate class in Mathematics for one semester,
- courses in Political Science, first by assisting, and then teaching undergraduate courses independently,
- a course in Chemical Engineering one afternoon per week,
- courses in Mechanical and Aerospace Science. Students also assist with grading and consulting.
- Sociology for one year.

Candidates in other disciplines may also serve as teaching assistants:

- in their second and third year (History),
- in the Computer Center (Mathematics and Computer Science),
- in their first year, students are assigned as readers for an undergraduate course in literature; in the second year, they are assigned to teach in the classroom 6 hours per week—Rhetoric and Composition courses, and undergraduate English.
- in the introduction of Psychology,
- for at least two semesters; or teach an undergraduate laboratory course for at least five hours a week for one semester.
- for one year.

Courses

In some departments, another type of requirement is that students seeking a doctorate in a discipline are required to register for one or more courses oriented towards problems, issues, and methodologies to assist the candidates in acquiring information concerning college teaching in specific disciplines or to provide ideas that can be applied to transcend disciplines. Some of the course offerings suggested are: (Numbers 500 or above are graduate courses)

- Bio-Physics. Doctoral students register for eight sections of Teaching Apprenticeship during the first nine quarters.
- Literary Studies. A few unit courses on teaching composition and seminar in Teaching French, German, or Spanish are provided.
- Mathematics — Pure and Applied. A one credit proseminar is devoted to the problems of instruction.
- Supervised or Independent Seminar on Teaching (for example, 690 College Teaching Seminar in Psychology)

• 500, 501, or 503	Teaching Assistant Practicum or Teaching Assistant Training
• 996	College Teaching Experience (Curriculum and Instruction Educational Policy & Administration).
• 580	Discussion of the Problems of Instruction in Philosophy (Philosophy).
• 691	College Teaching Practicum in Interpersonal and Public Communication.
• 598	Teaching Apprenticeship (English).
• German 302	Methods of Teaching German.
• GRS 500	Workshop on Instruction in Higher Education.
• EDAS 590	Teaching of Administration and Supervision at Post-Secondary level.
• ENG 591	Composition Instructor's Workshop.
• ENG 595	Workshop on Current Topics in English.
• ENG 407	Methods of Teaching English as a Second Language.
• ENG 408A, 408B, or 408C	Problems in the Teaching of Reading.
• ENG 409	Teaching Competencies in English.
• ENG 807	Advanced Methods of Teaching English as a Second Language.
• ENG 840	Writing Workshops for Teachers.
• ENG 841	Topics in the Teaching of English.
• ENG 845 or 846	Approaches to Languages.
• ENG 847	Reading and the English Teacher.
• ENG 849	English Teaching Workshop.
• ENG 895	College Teaching of English Language and Literature.
• ENG 895B	College Teaching of English Language and Literature: Reading.
• ENG 895C	College Teaching of English Language and Literature: Writing.

Departmental Requirements — Ed.D. Modifications

This group includes Ed.D. requirements for teaching in education as well as in other fields. In various institutions candidates are required to participate in one or more of the following:

Internship: Students in Special Education must complete an internship in college teaching, while Elementary Education students intern under supervision for one semester or a summer.

Supervised Teaching: In the following disciplines, students teach under the supervision of the faculty in: Vocational and Technical Education; Social and Philosophical Foundation, Special Education; Learning, Cognition, and Development; Science and Humanities Education; and Reading.

Teaching Experience: Some practice teaching experience in Art is provided.

In those few institutions in which the Ed.D. is so defined as to be the equivalent of the D.A. requirements may include such features as those already noted among Ph.D. adaptations.

In summary, this lengthy list of Ph.D. and Ed.D. modifications indicate various ways in which departments have undertaken to require experiences in teaching. In general, departments in the Humanities and in the social sciences demonstrated more commitment to this task than did those in the natural sciences.

Doctoral College Teaching Graduates Over the Past Five Years

For most of the responding institutions, it was almost impossible to determine how many doctoral recipients completed programs that were oriented or designed explicitly for undergraduate college teaching. Indeed, we suspect from the responses that no attempt to maintain such records was made. No doubt most departments and graduate schools would assert that their doctoral graduates would do an acceptable job of undergraduate teaching. If we understand and report their responses correctly, there were seven institutions that provided clear evidence on the number of individuals who have, over the past five years, completed degree requirements adapted to a career in college teaching. These institutions and the data reported follow.

Ball State University (Ph.D.) Graduates	
English	22
Social Science	13
Oklahoma State University (Ed.D. Graduates)	76

Indiana State University	
Elementary Education (Ed.D.)	2
English (Ed.D.)	49
Northern Arizona (Ed.D.)	
History and Political Science	1
University of New Mexico (Both Ed.D & Ph.D.)	
Ibero-American Studies	3
Educational Foundations	32
Health Education	5
Northeastern University (Both Ed.D. & Ph.D.)	
Sociology and Anthropology	4
North Texas State University	
(Both Ed.D. and Ph.D.)	104

In total, these seven institutions provided 311 individuals with doctoral degrees adapted for a career in college teaching.

II. DEGREE ADAPTATIONS—CASE STUDIES

Case Studies of Ph.D. Adaptations

Several universities provided explicit specifications for degree adaptations to individuals planning a career in college teaching. We have selected some examples describing how different universities have chosen to design and modify Ph.D./Ed.D. degree programs to assist individuals for a career in college teaching. The statements that follow are taken (usually with slight modifications) from catalogs and/or letters received from the institutions.

Bowling Green State University — Some doctoral programs at Bowling Green State University require students to participate in one or more of the following:

1. Complete a presession workshop in the fall or late summer dealing with pedagogy, instructional media, motivation of students, referrals to support services and a micro-teaching videotape.
2. Complete a departmental pedagogy course on the teaching of a particular content.
3. Earn credit via teaching internship on campus and through externships off campus.
4. Use the services of the Instructional Media Center and the Instructional Development Center.

Students also have another option at Bowling Green State University. They may choose to register for courses on teaching depending on their field of interest, hence teaching experiences are also provided through these course offerings:

- Workshop on Instruction in Higher Education
- EDAS 590 Teaching Administration and Supervision at Post-Secondary level
- EDAS 605 Internship or Field Service
- EDAS 703 Seminar on Teaching in Higher Education
- ENG 589 Internship
- ENG 590 Teaching Writing
- CDIS 692 Teaching Communication Disorders
- THEA 691 Teaching Oral Interpretations
- THEA 694 Teaching Theatre
- CDIS 434 Teaching Beginning Speech to the Deaf
- CDIS 436 Teaching Advanced Speech to the Deaf
- ENG 593 Teaching Literature
- ENG 691 Teaching English as Second Language
- HIST 590 Teaching History at College Level
- MATH 590 Seminar on Teaching College Mathematics
- SOC 590 Teaching Introductory Sociology
- SOC 690 Internship in College Teaching

Emory University — A degree for a career in college teaching is available in the following disciplines: Anatomy, Biology, Graduate Institute of the Liberal Arts (ILA), History, Mathematics and Computer Science, Pathology, Physiology, Religion and Sociology. The requirements for these disciplines vary. The 1982-83 Graduate School Bulletin states:

Anatomy: "The program provides a general educational background in the basic biological sciences and advanced training in a special area as preparation for a career as an independent scientific investigator and teacher." (p. 50).

"Teaching experience is provided by student participation in seminar courses and in laboratory instruction in anatomy courses." (p. 51).

Biology: "As part of basic training, all graduate students must serve as teaching assistants in an undergraduate laboratory course for at least five hours a week for one semester. Additional teaching experience may be required of doctoral students." (p. 63).

Graduate Institute of the Liberal Arts (ILA): "The ILA wishes to provide its graduates with a versatility that will equip them for teaching in interdisciplinary programs, for innovative teaching in traditional disciplines . . . ." (p. 89).

"Through teaching assistantships in the undergraduate liberal studies (administered by the ILA) and in various other undergraduate courses (Afro-American and African studies, American civilization, English, art history, modern languages), the ILA gives its students the opportunity to gain teaching experience." (p. 89).

"Within the general studies context students may also concentrate on an interdisciplinary humanities program that will prepare them for humanities teaching, a reading and literacy program (in cooperation with the Division of Educational Studies), or a unique art history program with an interdisciplinary emphasis." (p. 96 and 97).

History: "The department offers two four-year programs leading to the Ph.D. degree. They differ only in detail. The first is designed for students preparing for university teaching or research. It requires two years of graduate course work beyond the B.A. and about two years of research. The latter phase may include part-time teaching." (p. 102).

"The second program is designed for students preparing for college teaching. It involves about two and one-half years of graduate course work beyond the B.A. and about one and one-half years of research. The latter phase may include part-time teaching." (p. 103).

"All doctoral students are normally required to take History 786 a, b, Introduction to College Teaching, during their second year of graduate work." (p. 103).

Mathematics and Computer Science: "Teaching is considered to be an integral part of the doctoral program in mathematics, and students are required to teach at least two one-semester courses as part of their training." (p. 116).

Pathology: "Many students enter experimental pathology in anticipation of pursuing careers which combine research with teaching and/or service in health care fields of clinical microbiology, clinical immunology, medical genetics, etc. The department offers specialty tracks designed to prepare students in these areas. Students in these tracks receive specialized training in the particular area in addition to the regular curriculum of basic science courses and research." (p. 126).

Physiology: "Our program is intended to provide a background in basic health science and advanced training in a special area as preparation for a research and teaching career in physiology. Entering students take courses in physiology, biochemistry, statistics, and computer programming. These courses are prerequisites for advanced courses in special areas. Areas for graduate research include cellular physiology, systems physiology, neurophysiology, endocrinology, and reproduction. Opportunities to gain instructional experience are provided by seminar and lecture presentations and by assisting in student laboratories." (p. 141).

Psychology: "The doctoral program in human experimental/developmental psychology is designed to prepare individuals for careers in research and college teaching." (p. 147).

Religion: "The Division of Religion has programs designed to prepare the student for teacher/scholar competence in one of the specialized fields of the division and in interdisciplinary investigation. Five departments constitute the Division of Religion: Old Testament studies; New Testament studies; historical studies; theological studies; and ethics, society, and personality. The work of the departments is oriented primarily toward the Doctor of Philosophy degree, though some departments also offer specialized Master of Arts degree within the framework of the doctoral program." (p. 153).

Ph.D. Requirements Religion: "The following provisions apply to all students in advanced standing in the Ph.D. program. . . (5) Each student is required to participate in an apprenticeship with a professor in the process of research and/or preparing and teaching a course in the School of Theology, Emory College, or the division. The involvement is approximatey six hours per week for one

semester, or its equivalent; 2 hours credit on an S/U basis is given." (p. 155).

"The purpose of this program is to equip students with theoretical and methodological competence in teaching and research in selected interdisciplinary fields at the intersection of religion and society in the modern world. Such positions may be found in college departments of religion, in seminaries, in church bureaucracies, congregations, and related settings." (p. 167).

Sociology: "In addition to the Graduate School general regulations, the department specifies the following uniform requirements for the Ph.D. degree: . . . (3) Teaching Apprenticeship. Each doctoral student is required to assist in teaching undergraduate courses for a one-year period under the direction of a member of the graduate faculty." (p. 173)

Indiana University of Pennsylvania — Preparation for a career in college teaching is available in Elementary Education, English and American Literature, and Counselor Education. Requirements also vary in these programs.

Elementary Education: A supervised internship consists of working for a semester or summer in an educational experience unlike one already experienced by the candidate.

English and American Literature: Candidates must demonstrate the ability to teach effectively either in the departmental teacher's internship program, or through other acceptable teaching experience.

English: The preservice candidate for this degree is expected to acquire a thorough understanding of the community college as an institution and to demonstrate largely through a semester's internship at a community college the ability to teach effectively. The inservice candidate for this degree may have the internship waived after the description and evaluation of the student's teaching experiences have been accepted.

Counselor Education: Experiences are provided for teaching in higher education.

Marquette University — Four of the ten academic departments offer doctoral programs for students pursuing a career in college teaching.

Biology: All graduates are required to earn the equivalent of one year of teaching experience during their graduate program. Teaching assistantships awarded by the university generally are the means through which students gain this experience.

Curriculum and Instruction: Students can earn the equivalent of one year teaching experience during their graduate program.

Educational Foundation: Students gain teaching experience through teaching assistantships.

English: In the first year teaching assistants are assigned as readers for an undergraduate lecture course in literature. In their second year, they are in the classroom six hours per week in the rhetoric and composition of courses. Students are required to take a course in Teaching College Composition and Literature in their first semester.

Michigan State University — During the late 1940's and early 1950's, many persons teaching in the required general education program (Basic College and later University College) took the Ed.D. This degree permitted omission of the foreign language requirement and included a significant number of courses in the teaching discipline. The dissertation was usually devoted to study of an instructional problem in the discipline. With the demise of the language requirements, the Ph.D. became the preferred degree. For some years, a Ph.D. for College Teaching was offered in several departments, but the requirement of supervised teaching experience **in addition** to the traditional research Ph.D. requirements resulted in few individuals taking that program. Thus the Ph.D. for College Teaching ultimately disappeared. Depending on the department and the doctoral program adviser, some adaptations are presently available for an individual who desires them. The Department of English provides a doctoral program in English to assist students desirous of pursuing a career in college teaching. Some of the available courses are:

- ENG 407 Methods of Teaching English as a Second Language
- ENG 408A Problems in the Teaching of Reading
- ENG 408B Problems in the Teaching of Reading
- ENG 408C Problems in the Teaching of Reading
- ENG 409 Teaching Competence in English
- ENG 807 Advanced Methods of Teaching English as a Second Language
- ENG 849 Writing Workshops for Teachers
- ENG 841 Topics in the Teaching of English
- ENG 845 Approaches to Language
- ENG 846 Approaches to Language
- ENG 847 Reading and the English Teacher
- ENG 849 English Teaching Workshop
- ENG 895 College Teaching of English Language and Literature
- ENG 895B College Teaching of English Language and Literature: Reading
- ENG 895C College Teaching of English Language and Literature: Writing

New York State College of Agriculture and Life Sciences, Cornell University — For a number of years, Cornell University has offered the Ph.D. for persons interested in college teaching, but who have preferred an area of scholarship devoted to research on teaching/learning in the college setting rather than in their disciplinary specialization. In general, these candidates either had a Master's degree in their discipline, or obtained at least the equivalent Master's degree preparation in their subject fields. In many cases, their coursework preparation equalled or excelled that of Ph.D. candidates in their fields.

In addition to substantial academic preparation in the subject field, emphasis is placed on the Ph.D. thesis, and most of the students have worked from a solid theoretical framework in designing theses that have contributed to a programmatic effort in applying new knowledge in cognitive learning and curriculum theory to the improvement of college teaching.

Western Michigan University — The departments of Mathematics, Psychology and Education have provided recognition of degree adaptations appropriate to individuals planning a career in college teaching.

Mathematics: As part of his/her training, each applicant will instruct a sophomore or junior level mathematics course (under the guidance of a faculty member), and will participate in faculty discussion of college mathematics teaching and curricula.

Psychology: Students are required to take the following courses:

690 College Teaching Seminar — Discussion and design of college instructional technology, especially recent developments and research. Topics considered are decision-making, source materials, behavioral objectives, course design and programming, testing and evaluation, remediation, and grading practices.

691 College Teaching Practicum — Supervised practice in the instruction of Psychology at the undergraduate level. The student will be responsible for the design, execution, and evaluation of a college course section involving undergraduate students.

Special Education: In addition to the prescribed coursework, the student will complete an internship in college teaching and an internship in administration of programs in special education.

Seven universities — Bowling Green, Emory, Indiana University of Pennsylvania, Marquette, Michigan State, New York State College of Agriculture and Life Science—Cornell University, and Western Michigan University reported modifications of their Ph.D. degree programs to assist individuals planning a career in college teaching. Departments differ in their requirements. However, opportunities for teaching experiences are fostered through: courses offered, internships, externships, teaching undergraduate courses, teaching assistantships, and dissertations emphasising some aspect

of college teaching. Over the past five years, 35 individuals have completed (in these institutions) Ph.D. degree requirements adapted to a career in college teaching.

Case Studies of Ed.D. Adaptations

Florida Atlantic University — The Curriculum and Instruction program is designed for community college teachers. The minimum degree requirements are:

1. teaching field in graduate level courses,
2. cognate to teaching field,
3. the dissertation can be either an original contribution to knowledge or a study of a significant instructional problem in the teaching field,
4. supervised internship.

Oklahoma State University — The Ed.D. in College Teaching is a multidisciplinary program which was developed in cooperation with many departments. It is designed specifically to prepare future teachers in community/junior colleges, 4-year colleges, and universities.

Students working toward the Ed.D. in Higher Education College Teaching divide their course work between the teaching speciality and higher education. Generally two-thirds to three quarters of the course work is taken in the teaching speciality.

Generally in these two universities (Florida Atlantic University and Oklahoma State University) students are required to participate in one or more of the following teaching experiences: select a cognate in the teaching field, write a dissertation stressing a significant aspect of the instructional problem, enroll in one of the cooperative programs developed in conjunction with other departments on campus, and develop a strong competence in an academic area that stresses the interdisciplinary approach.

III. SUMMARY

Some Ph.D. and Ed.D. programs modified for college teachers provide a variety of teaching experiences for prospective college teachers without ignoring basic competencies and substantive content required in a specialized discipline. Of the 122 universities responding to the survey, 50 either implicitly or explicitly indicated some type of adaptations to accommodate individuals with such career aspirations.

Although it is generally unclear if the university wide statements were sanctioned by the graduate school, departments, or doctoral committees, or how the program was implemented and evaluated, nevertheless, university wide statements were found in Ph.D. program modifications designed by Ball State University, Bowling Green State University, Clark University, Duke University, Wake Forest University, and the University of Kansas. Candidates are required to participate in one or more of the following: teach a course in one specific discipline, register or take a course oriented to college teaching, and teaching apprenticeship.

Some university did not state explicitly their Ed.D. and/or Ph.D. adaptations, nevertheless, there were implications of flexibility of the program to incorporate activities and experiences to assist those desirous of pursuing college teaching as a career. Some departments construct doctoral programs on the rationale that graduates may eventually teach as part of their professional career.

Thirty universities indicated the existence of departmental Ph.D. program modifications. The departmental requirements may include the students' participation in one or more of the following: teaching apprenticeship, teaching practicum, individual adaptations, co-teaching, developing and evaluating instructional material, dissertation/thesis focusing on some aspect of teaching, internship, externship, supervised teaching, teaching assistantships, teaching and/or taking a course.

Most Ed.D. programs that relate to college teaching are geared to teaching of education courses but a few Ed.D. programs are sufficiently flexible that they can look very much like Ph.D. or D.A. degree programs.

Since the senior author has for several years been involved in the review of the developments of the Doctor of Arts programs, comparison of the alternative degrees seems appropriate. However, since doctoral program planning is to a large degree idiosyncratic to departments, doctoral committees, and the experiences and aspirations of the candidates, generalizations must be very limited. Some departmental D.A. programs still exhibit a subjection to the research Ph.D. syndrome. Some combining several of the characteristics and experiences listed at the beginning of this monograph go well beyond the adaptations described here for various Ph.D. and Ed.D. programs. In brief, the D.A. and the Ph.D. and Ed.D. adaptations do differ, but they also overlap. One thing is clear. The demands of undergraduate teaching have been recognized in many universities as distinctive from the demands of research and graduate instructions, and some adaptations have

become available and accepted. The choice among the three degrees by an individual committed to a career in college teaching will depend on personal preference, availability in the immediate locality, and costs in time and dollars. Although the D.A. has become widely known and accepted, the Ph.D. continues to be the only acceptable degree in some institutions. Hence degree choice may open up some career possibilities while eliminating others.

References

Aleamoni, L. M. *The Usefulness of Student Evaluations in Improving College Teaching*. Urbana: Measurement and Research Revision, Office of Instructional Resources, University of Illinois, 1974.

Dressel, P. L. and Delisle, F. H. *Blueprint for Change: Doctoral Programs for College Teachers*. ACT Monograph No. 8. Iowa City: American College Testing Program, 1972.

Dressel, Paul L. *College Teaching as a Profession: The Doctor of Arts Degree*. East Lansing, Michigan: Michigan State University, 1982.

Dressel, Paul L. and Marcus, Dora. *On Teaching and Learning in College*. San Francisco: Jossey-Ball Publishers, 1982.

Dressel, Paul L. and Thompson, Mary Magdala. *College Teaching: Improvement by Degrees*. U.S.A.: The American College Testing Program, 1974.

Dressel, Paul L. and Thompson, Mary Magdala. *A Degree for College Teachers*. The Doctor of Arts. A Technical Report for the Carnegie Council on Policy Studies in Higher Education. U.S.A.: The Carnegie Foundation for the Advancement of Teaching, 1977.

Eble, K. E. *The Craft of Teaching: A Guide to Mastering the Professor's Art*. San Francisco: Jossey-Bass, 1976.

Falk, B., and Lee, D. K. *The Assessment of University Teaching*. London: Society for Research into Higher Education, 1971.

Finger, F. W. *Professional problems: Preparation for a Career in College Teaching*. Washington, D.C.: ERIC Clearinghouse on Higher Education, George Washington University, April 1970.

Gaff, J. G. (Ed.) *New Directions for Higher Education: Institutional Renewal Through the Improvement of Teaching*, no. 24. San Francisco: Jossey-Bass, 1978.

Hawkes, J. *The Teaching of Writing to College Freshmen*. Stanford, CA: Graduate Stanford University, 1968.

Joint Council on Economic Education. *College Preparation for Teaching Economics*. New York: Joint Council on Economic Education, 1969.

Kitzhaber, A. R. *Themes, Theories, and Therapy: The Teaching of Writing in College*. New York: McGraw-Hill, 1961.

Knopf, K. A., and Stauss, J. H. (Eds.) *The Teaching of Elementary Economics*. New York: Holt, Rinehart and Winston, 1960.

Koen, G. "The Preparation of College Teachers." In D. S. Dean, *Preservice Preparation of College Biology Teachers*. Washington, D.C.: Commission on Undergraduate Education in the Biological Sciences, American Institute of Biological Sciences, 1970.

McKeachie, W. J. *Research on College Teaching: A Review*. Report No. 6. Washington, D.C.: ERIC Clearinghouse on Higher Education, George Washington University, 1970.

Milton, O., and Associates. *On College Teaching: A Guide to Contemporary Practices*. San Francisco: Jossey-Bass, 1978.

Trillin, A. S., and Associates. *Teaching Basic Skills in College: A Guide to Objectives, Skills Assessment, Course Content, Teaching Methods, Support Services, and Administration*. San Francisco: Jossey-Bass, 1980.

Wilson, R. S., and Hildebrand, M. *Effective University Teaching and Its Evaluation*. Berkeley: Center for Research and Development in Higher Education. University of California, 1970.